

# SLOVENSKI STANDARD

## SIST EN 3646-004:2016

01-marec-2016

Nadomešča:

SIST EN 3646-004:2014

---

**Aeronavtika - Konektorji, električni, okrogli, bajonetno sklapljanje, stalna delovna temperatura 175 °C ali 200 °C - 004. del: Podloga, pritrjena z matico - Standard za proizvod**

Aerospace series - Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous - Part 004: Receptacle, jam-nut mounting - Product standard

**iTeh STANDARD PREVIEW**

(standards.iteh.ai)  
Luft- und Raumfahrt - Elektrische Rundsteckverbinder mit Bajonettkupplung, Betriebstemperatur 175 °C oder 200 °C konstant - Teil 004: Fester Steckverbinder mit Mutterbefestigung - Produktnorm [SIST EN 3646-004:2016](https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fdb16c/sist-en-3646-004-2016)

<https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fdb16c/sist-en-3646-004-2016>

Série aérospatiale - Connecteurs électriques circulaires à accouplement par baïonnettes, température d'utilisation 175 °C ou 200 °C continu - Partie 004: Embasse à fixation par écrou - Norme de produit

**Ta slovenski standard je istoveten z: EN 3646-004:2015**

---

**ICS:**

31.220.10	Vtiči in vtičnice, konektorji	Plug-and-socket devices. Connectors
49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

**SIST EN 3646-004:2016**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 3646-004:2016

<https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fdb16c/sist-en-3646-004-2016>

EUROPEAN STANDARD

**EN 3646-004**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2015

ICS 49.060

Supersedes EN 3646-004:2013

English Version

**Aerospace series - Connectors, electrical, circular, bayonet  
coupling, operating temperature 175 °C or 200 °C  
continuous - Part 004: Receptacle, jam-nut mounting -  
Product standard**

Série aérospatiale - Connecteurs électriques circulaires  
à accouplement par baïonnettes, température  
d'utilisation 175 °C ou 200 °C continu - Partie 004:  
Embase à fixation par écrou - Norme de produit

Luft- und Raumfahrt - Elektrische Rundsteckverbinder  
mit Bajonettkupplung, Betriebstemperatur 175 °C oder  
200 °C konstant - Teil 004: Fester Steckverbinder mit  
Mutterbefestigung - Produktnorm

This European Standard was approved by CEN on 8 June 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>		Page
<b>European foreword</b> .....		<b>3</b>
<b>1</b>	<b>Scope</b> .....	<b>4</b>
<b>2</b>	<b>Normative references</b> .....	<b>4</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>4</b>
<b>4</b>	<b>Required characteristics</b> .....	<b>4</b>
<b>5</b>	<b>Designation</b> .....	<b>8</b>
<b>6</b>	<b>Marking</b> .....	<b>9</b>
<b>7</b>	<b>Technical specification</b> .....	<b>9</b>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 3646-004:2016](#)

<https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fdb16c/sist-en-3646-004-2016>

## European foreword

This document (EN 3646-004:2015) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 3646-004:2013.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

[SIST EN 3646-004:2016  
https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fdb16c/sist-en-3646-004-2016](https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fdb16c/sist-en-3646-004-2016)

**EN 3646-004:2015 (E)****1 Scope**

This Standard defines the characteristics of the jam-nut mounted receptacles of the family of bayonet coupling circular connectors, intended for use in an operating temperature range of  $-65\text{ °C}$  to  $175\text{ °C}$  or  $200\text{ °C}$  continuous.

It applies to models defined in Table 4.

For contact, filler plugs and rear accessories associated with this receptacle see EN 3646-002. For plugs and protective covers see EN 3646-008 and EN 3646-009 respectively.

**2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3155-002, *Aerospace series — Electrical contacts used in elements of connection — Part 002: List and utilization of contacts*

EN 3646-001, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature  $175\text{ °C}$  or  $200\text{ °C}$  continuous — Part 001: Technical specification*

EN 3646-002, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature  $175\text{ °C}$  or  $200\text{ °C}$  continuous — Part 002: Specification of performance and contact arrangements*

EN 3646-008, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature  $175\text{ °C}$  or  $200\text{ °C}$  continuous — Part 008: Plug — Product standard*

EN 3646-009, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature  $175\text{ °C}$  or  $200\text{ °C}$  continuous — Part 009: Protective cover for receptacle — Product standard*

ISO 3161, *Aerospace — UNJ threads — General requirements and limit dimensions*

**3 Terms and definitions**

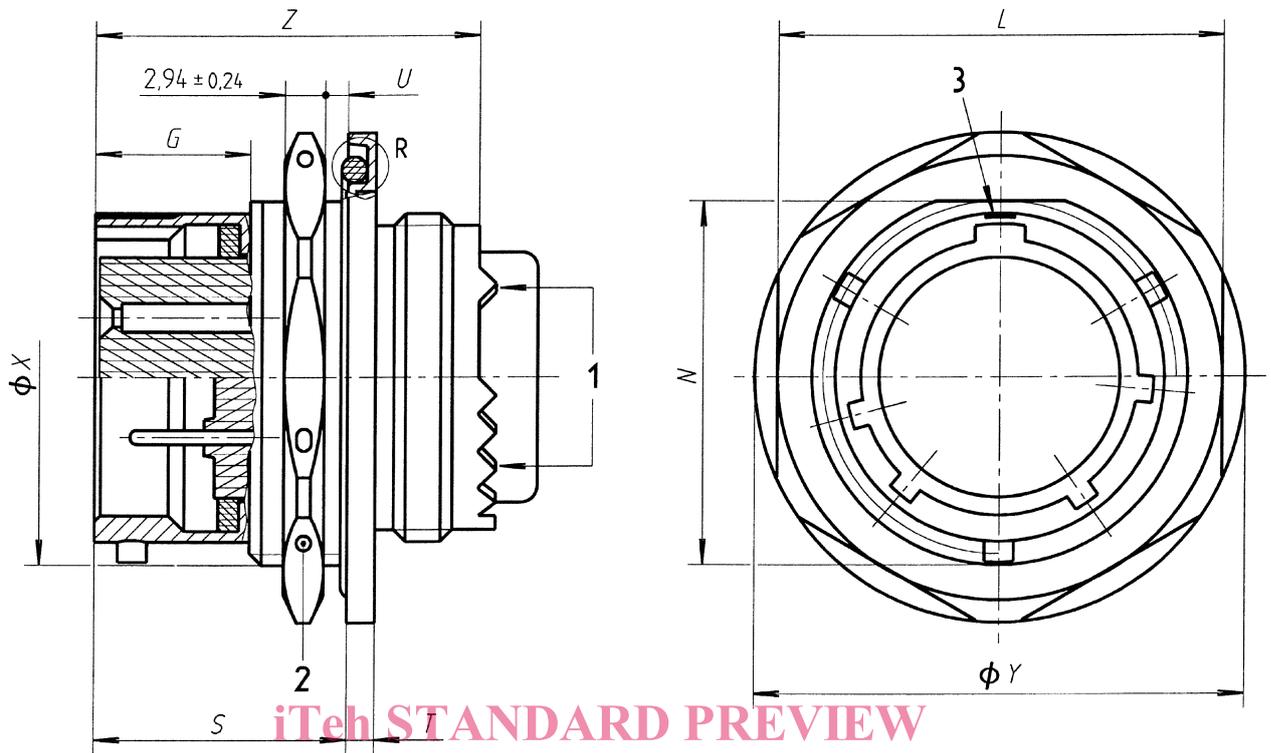
For the purposes of this standard, the terms and definitions given in EN 3646-001 apply.

**4 Required characteristics****4.1 Dimensions and mass**

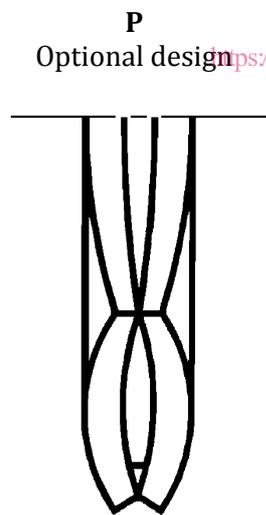
See Figure 1 and Table 1.

Dimensions and tolerances are in millimetres, they apply after surface treatment.

Interface mating and rear dimensions, see EN 3646-001.

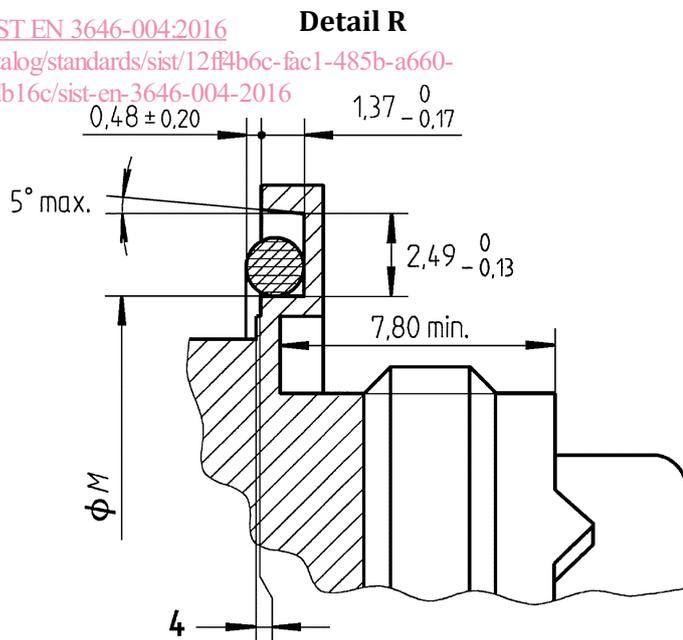


iTeh STANDARD PREVIEW  
(standards.iteh.ai)



Slot with close edges for the nut

SIST EN 3646-004:2016  
<https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fdb16c/sist-en-3646-004-2016>



**Key**

- 1 According to variant
- 2 Three equally spaced holes diameter 1 min. for locking wire (see option detail P)
- 3 Polarizing strip optional colour
- 4 0,13 max. to end of the flat

**Figure 1 — Jam-nut mounted receptacle**

Table 1

Housing size	<i>G</i>	<i>L</i>	<i>M</i>	<i>N</i>	<i>S</i>	<i>T</i>	<i>U</i>	<i>X</i>	<i>Y</i>	<i>Z</i>	Mass <sup>b</sup>
	min.	max.	min.	$0$ $-0,25$	max.			Thread <sup>a</sup> UNJEF-2A	max.	max.	g max.
08	9,00	19,48	15,34	13,45	17,95	2,87 1,90	4,75 1,57	0,5625-24	23,30	25,90	6
10		22,66	18,52	16,64				0,6875-24	26,60		8
12		27,41	23,25	20,78				0,8750-20	31,35		11
14		30,61	26,45	23,93				1,0000-20	34,65		16
16		33,76	29,62	27,08				1,1250-18	37,70		21
18		36,96	32,80	30,25				1,2500-18	40,90		23
20	9,50	40,11	37,55	33,43	19,61	3,76 1,90	6,35	1,3750-18	45,65	27,50	29
22		43,31	40,75	36,60				1,5000-18	48,85		38
24		46,46	43,92	39,78				20,40	5,56 1,57		1,6250-18

<sup>a</sup> See ISO 3161.

<sup>b</sup> Mass without accessory and without contacts.

ITeH STANDARD PREVIEW  
(standards.iteh.ai)

#### 4.2 Tightening torque of attachment nut

See Table 2.

SIST EN 3646-004:2016  
<https://standards.iteh.ai/catalog/standards/sist/12ff4b6c-fac1-485b-a660-cdc8b0fd1166/sist-en-3646-004-2016>

Table 2

Housing size	Torque N.m ± 10 %
08	3,35
10	4,10
12	8,90
14	9,55
16	10,15
18	10,95
20	11,65
22	12,30
24	13

### 4.3 Panel cut-out

Recommended panel cut-out dimensions: see Figure 2 and Table 3.

Dimensions and tolerances are in millimetres.

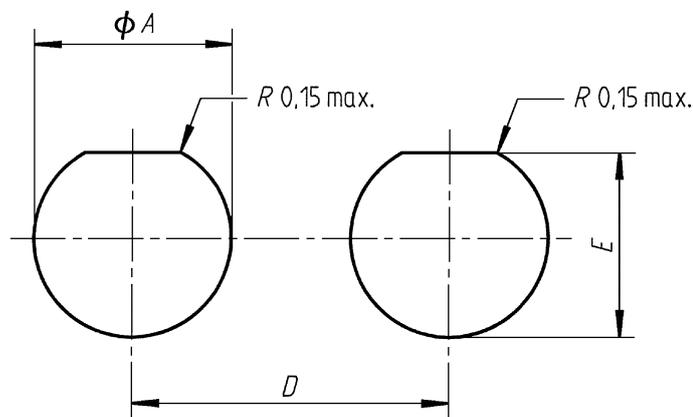


Figure 2

Table 3

Housing size	A +0,25 0	D min.	E +0,25 0
08	14,40	32	13,48
10	17,58	35	16,66
12	22,60	38	20,80
14	25,52	41	23,95
16	28,70	45	27,10
18	31,87	47	30,27
20	35,05	51	33,45
22	38,22	53	36,62
24	41,40	57	39,80

### 4.4 Material and surface treatment

See Table 4.

### 4.5 Main general characteristics

See EN 3646-002.

### 4.6 Possible combinations of plugs and receptacles

See EN 3646-002.